

ERNEST BROWN BABCOCK  
1877-1954

With the passing of Ernest B. Babcock in Berkeley, California, on December 8, 1954, the botanists of California lost one of their most distinguished colleagues and a kindly, warm-hearted friend.

Professor Babcock was best known to botanists as the author of one of the finest monographs in the field of plant science, his monumental work on *Crepis*. This work, which was the climax of thirty years of intensive research by himself and his associates, brought together a larger body of information about the systematics, cytogenetics, and evolution of a large genus than had ever been gathered before its publication in 1947. His remarkable collection of herbarium specimens of species of *Crepis* and related genera, part of them collected in the field, and part of them made from plants grown in the garden and greenhouse, was presented before his death to the Herbarium of the University of California. As the author of several new species of *Crepis*, he combined the meticulous attention to accuracy of detail which is necessary for a taxonomist with the vision and understanding which he used to excellent advantage in the ensuing long series of experiments and observations in the field of cytogenetics. Above all, he was an evolutionist. A deeply religious man, he looked upon the successive evolution of ever more varied forms of life as the strongest evidence which man can obtain regarding the master plan of the Creator.

Mr. Babcock was born in Edgerton, Wisconsin, on July 10, 1877. He came to California in 1896 with his parents, Emilus Welcome and Mary Eliza (Brown) Babcock. His interest in plants had already begun at that time, since he more than once told his friends about the enthusiasm with which, as a child, he tended the plants in his mother's conservatory. After graduating from the Los Angeles Normal School, he went to the University of California, where he remained for the rest of his life. He received the B.S. degree in 1905, and in 1907 was appointed to the University faculty, on which he served for forty years. In 1913, he became chairman of the newly founded Division of Genetics in the College of Agriculture, and retained that position until his retirement in 1947.

Professor Babcock was introduced to the flora of California by Harvey Monroe Hall, who became his friend during undergraduate years in Berkeley, and with whom he took several long botanizing trips in the High Sierra. Until Dr. Hall's death, he and Babcock were inseparable friends. They published together a systematic and genetic study of *Hemizonia*, and Dr. Hall's stimulus did much to inspire Professor Babcock to begin his study of *Crepis*.

In 1908, he married Georgia Bowen, a childhood friend and neighbor from Edgerton, Wisconsin. She survives him.

Professor Babcock's career is noted for a number of accomplishments in the field of Genetics and Plant Breeding. The most noteworthy of these



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was the authorship, with his colleague R. E. Clausen, of the textbook, *Genetics in Relation to Agriculture*. This work appeared in two editions, the first one in 1918 and the second in 1927. For many years it was a standard textbook in the field of Genetics. In his earlier years as a plant breeder he made the hybridizations which led to the production of the Babcock peach, a variety which until recent years was one of the foremost of the varieties suited to the warmer parts of California.

When Professor Babcock began his studies of the genus *Crepis* in 1920, the idea of using cytogenetic information to clarify taxonomic relationships was a novel one. The enthusiasm with which he and his associates embarked upon this project, the obvious value of even their earlier publications, and the striking clarity of the exhibits which he presented at various meetings of national scientific societies and international congresses did much to impress botanists with the importance of this type of work. To those botanists interested in evolution who attended the Sixth International Congress of Genetics at Ithaca in 1932, Professor Babcock's "Evolutionary Tree" of *Crepis*, with living plants of representative species and illustrations of their chromosomes placed side by side in order of

their phylogenetic position, became a major center of interest, and made a lasting impression.

Not long after he had begun his studies of the Old World species of *Crepis*, he turned his attention to the much smaller number of species endemic to North America. He found there a pattern of relationships entirely different from that in the Old World, and based upon hybridization, polyploidy, and particularly apomixis. With characteristic thoroughness, and in collaboration with the present writer, he worked out the entire pattern of relationships among these species, and published this study as the first monographic contribution on the genus itself. Meanwhile, he had become interested in the genera related to *Crepis*, and either carried out himself or promoted the execution by his associates of a series of monographic studies which showed clearly the position of the genus within the family Compositae.

These preliminary monographic studies paved the way for the publication of the final great work, which coincided with Professor Babcock's retirement from the active faculty of the University of California. Professor Babcock's monograph of *Crepis* has been acclaimed by all who have used it as taxonomically sound, broad in scope, and meticulously accurate in execution. It will remain for many years as a classical model for monographic studies.

Professor Babcock's career did not end with his retirement. During the last seven years of his life, he devoted much energy toward advancing the cause of scientific research, both in connection with the California Academy of Sciences, of which he became President in 1953, and with the Institute of Forest Genetics at Placerville. As Vice-President of the Forest Genetics Foundation, he was the stimulus of a nation-wide movement to encourage research toward the utilization of the best germ plasm available in the restoring of our forest resources by replanting. This final activity emphasized one of Professor Babcock's outstanding qualities. For his inspiration he always looked toward the future rather than backward toward the past.

As might be expected of a scientist with such outstanding attainments, Professor Babcock belonged to a large number of scientific societies, and became an officer of many of them. He was President of the California Botanical Society in 1941, and of the Society for the Study of Evolution in 1952. He was a member of the American Society of Naturalists, the Washington Academy of Sciences, and the National Academy of Sciences. His Alma Mater recognized his preeminence in 1944 by awarding him the Faculty Research Lectureship and in 1947 by conferring upon him the honorary degree of LL.D.

All those who knew him, whether intimately or casually, whether as students, colleagues, or friends, recognized in Ernest Babcock an exceptional personality. His broad understanding of nature, combined with his kindness, generosity, and faith in the goodness of all mankind created a feeling of good will among a wide circle of humanity.—G. L. STEBBINS, Division of Genetics, University of California, Davis.